Claims pending

- At time of the Action: Claims 8, 11 – 14, 16 – 19, and 21 - 23

- After this Response: Claims 8, 11 – 14, 16 – 19, and 21 - 23

Canceled or Withdrawn claims: None

Currently Amended claims: None

Listing of Claims

This listing of the claims will replace all prior versions and listings of claim in the present application.

1. **(Canceled)**

2. **(Canceled)**

3. **(Canceled)**

4. **(Canceled)**

5. **(Canceled)**

6. **(Canceled)**

7. **(Canceled)**

8.   (**Previously Presented**)   A method for reducing the crest factor of a data symbol to be transmitted in a multi-carrier data transmission system, the data symbol being a function of a plurality of signals provided within a predetermined data frame, each of the plurality of signals allocated to a carrier, each carrier occupying at least one frequency from a transmit data spectrum, at least one carrier being reserved which is not provided for the data transmission, the method comprising:

receiving the predetermined data frame, the predetermined data frame exhibiting the data symbol and a cyclic prefix which is derived from a part of the data symbol; and

performing crest factor reduction corresponding to the predetermined data frame based at least in part on peak values within the cyclic prefix of the predetermined data frame, by:

(a) filtering the data symbol and the cyclic prefix;

(b) determining whether a time-domain function of the data symbol and of the cyclic prefix within the predetermined data frame exhibits at least one peak value that exceeds a first threshold;

(c)   determining an amplitude of an exhibited peak value and an associated position within the predetermined data frame;

(d) generating a correction function by scaling and transposing a sample correction function in dependence on the amplitude and associated position of the exhibited peak value;

(e)   using the at least one carrier which is not available for data transmission for generating the sample correction function in the time domain; and

(f) modifying the data symbol to be transmitted by superimposing the correction function.

9. (**Canceled**)

10. (**Canceled**)

11. (**Previously Presented**)   The method as claimed in claim 8, further comprising repeating steps (b) – (e) until at least one of the following conditions has occurred: the data symbol no longer exhibits any peak values above the first threshold or a predetermined number of iteration steps has been reached.

12. (**Previously Presented**)   The method as claimed in claim 8, further comprising:

repeating steps (a) – (e) until at least one of the following conditions has occurred: the data symbol no longer exhibits any peak values above the first threshold or a predetermined number of iteration steps has been reached,

wherein the data symbol modified by the correction function is used for the filtering in step (a).

13. (**Previously Presented**)   The method as claimed in claim 8, further comprising oversampling at least the data symbol prior to step (b).

14. (**Currently Amended**) The method as claimed in claim 8, wherein step (d) comprises using a dirac-like function as the sample correction function.

15. (**Canceled**)

16.   (**Previously Presented**) A method for reducing the crest factor of a data symbol to be transmitted in a multi-carrier data transmission system, the data symbol being a function of a plurality of signals provided within a predetermined data frame, each of the plurality of signals allocated to a carrier, each carrier occupying at least one frequency from a transmit data spectrum, the method comprising:

(a)   receiving the predetermined data frame, the predetermined data frame having the data symbol and a prefix which is derived from a part of the data symbol;

(b)   performing crest factor reduction corresponding to the predetermined data frame by determining an amplitude of an identified peak value and an associated position within the predetermined data frame; and

(c)   generating a correction function by scaling and transposing a sample correction function in dependence on the amplitude and associated position of the identified peak value and using at least one carrier which is not available for data transmission for generating the sample correction function in the time domain.

17.   (**Previously Presented**) The method as claimed in claim 16, wherein the step (b) comprises searching for peak values exceeding a first threshold in the data symbol and in the cyclic prefix.

18.   (**Previously Presented**) The method as claimed in claim 17, wherein the step (b) comprises filtering the data symbol and the cyclic prefix over the predetermined data frame prior to searching for peak values.

19. (**Previously Presented**) The method as claimed in claim 18, wherein filtering the data symbol and cyclic prefix comprises using filtering characteristics corresponding to a downstream filter of the multi-carrier data transmission system.

20. (**Canceled**)

21. (**Previously Presented**) The method as claimed in claim 16, wherein step (b) comprises modifying the data symbol to be transmitted by superimposing the correction function.

22. (**Previously Presented**) The method as claimed in claim 17, wherein step (b) comprises oversampling at least the data symbol prior to searching for peak values.

23. (**Previously Presented**) The method as claimed in claim 16, wherein step (d) comprises using a direct-like function as the sample correction function.

24. (**Canceled**)

25. (**Canceled**)

26. (**Canceled**)

27. (**Canceled**)